

Jones Ball Fields Site
Northwest Corner of Britton Road/Main Street and Henney Road
Jones, Oklahoma, Oklahoma County

Summary of DEQ Activities

August 19, 2015



1.0 Introduction

The Jones Ball Fields Site is a former battery casing dump located at the northwest corner of Britton Road/Main Street and Henney Road in Jones, Oklahoma. The Jones Ball Fields are currently owned by the Town of Jones. Wastewater lagoons and a firing range owned by the Town of Jones are located to the north of the ball fields. A small creek forms the western edge of the ball fields and a convenience store is located to the east of the ball fields (see Figure 1).

In 2014-2015, the Town of Jones installed a new T-ball field in between the South Field and the North Field (see Figure 2). (Note: The South Field was referred to as the “Middle Field” in past reports, but because the two most southern fields have been removed and transformed into a parking lot, the Middle Field is now the South Field). New fencing was installed around the t-ball field and stadium lighting was also installed west of the new T-ball field. Additionally, in 2015 DEQ was informed that the Town of Jones has plans to put in a playground to the east of the new T-ball field.

1.1 Summary of DEQ Activities

For a summary of previous Department of Environmental Quality (DEQ) activities that occurred at the Jones Ball Fields, please see the *Jones Ball Fields Site, Summary of DEQ Activities, dated March 2012*.

2.0 Environmental Setting

The Jones Ball Fields are located in the Town of Jones, Oklahoma, in Oklahoma County (see Figure 1). The site is near a small tributary of the North Canadian River and a portion of the North Canadian River historically flowed through the northeast corner of the site. This area of Oklahoma County typically has short, mild winters and long, hot summers. Temperatures throughout the year can vary from below 0°F to above 100°F. Average annual precipitation is about 32 inches with most of it occurring in the spring. Soil along the North Canadian River and other large streams is best characterized by deep, nearly level, loamy sandy soils and is part of the Canadian-Dale soil complex. Soils in this complex are easy to till, have good water-holding capacity, and have medium to high fertility (Fisher, 1969). The thickness of the terrace deposits typically range from 50 to 100 feet in depth. Terrace deposits along the North Canadian River can be major aquifers. Groundwater wells in Jones, Oklahoma typically yield water that is good to fair chemical quality with some hardness and dissolved solids. These wells usually produce at a rate of 75 gallons per minute (Bingham, 1983). The topographic gradient near the site appears to be to the southwest towards Jones Creek with some storm water runoff flowing to the south and east towards the pond that is southeast of the Ball Fields.

2.0 Sampling Activities and Follow--up

On April 3, 2015, DEQ personnel took soil samples at the Jones Ball Fields (see Figure 3). Composite samples and grab samples were taken from the 0-6 inch soil interval. All samples were analyzed for lead. Refer to Table 1 for sample ID, location of sample, sample collection method, and lead value. Areas highlighted in gray exceed levels determined to be acceptable for the site (>500 ppm lead). Four samples (sample numbers 11, 14, 15, and 18) exceeded acceptable lead levels and had lead concentrations that ranged from 597 to 2270 ppm lead (Figure 4).

During a follow-up visit with the city on May 5, 2015, it was noted that the city had implemented certain engineering controls at the new T-ball field in order to prevent further contamination of the site. Excavated soil and debris were removed from fence-post locations, and the debris pile on the western side of the site had been removed. Additionally, the city had added sod to areas that were previously bare and added concrete foundations to the two dugouts.

3.0 Next Steps

The sample results demonstrated that areas associated with recent excavation (i.e. fence work, water line installation, electrical work) contained the highest lead concentrations. Due to recent excavation for the installation of fence posts and new ball field lighting, the dirt around the new fence posts and the debris pile on the western side of the site were the most highly contaminated. Additionally, the gravel from the parking area east of the T-ball field where digging had occurred to install a water line was also contaminated.

DEQ recommends that any excavated soil produced from future construction activities be removed, properly disposed of, and replaced with clean soil prior to use of the T-ball field. The T-ball field should be inspected and maintained regularly. Additionally, erosion prevention measures such as pavement, grass, or gravel should be placed on top of areas where soil has eroded. Sod should be replaced where it has worn down. DEQ also recommends that the gravel area east of the T-ball field be capped with clean soil and grass, gravel, pavement, or equivalent prior to the creation of a playground in that area.

Figure 1: Site Vicinity – Jones, OK



Figure 2: Location of New T-Ball Field

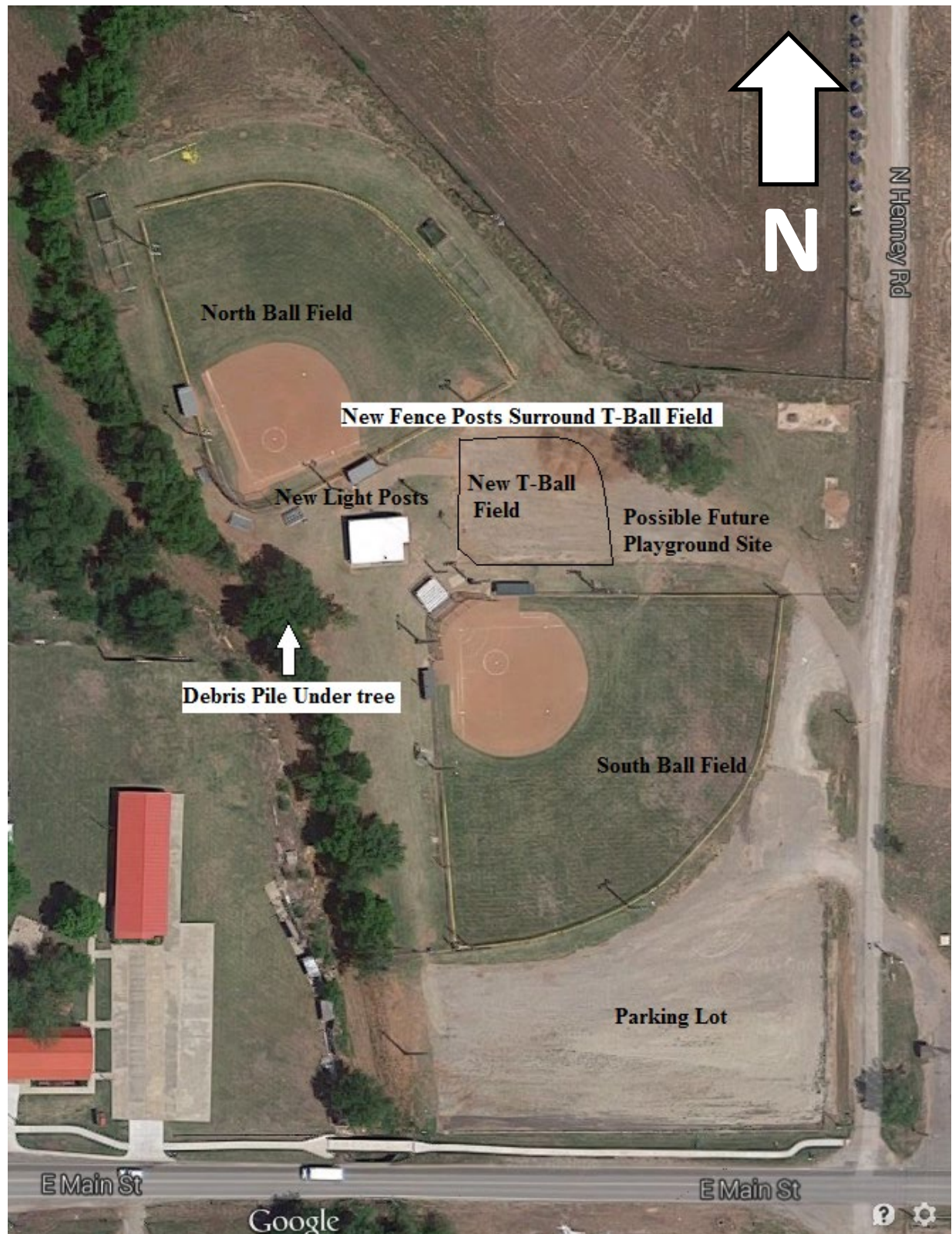


Figure 3: Soil Sample Locations



Legend

- Samples with Pb values >500 ppm
- Samples with Pb values <500 ppm
- Baseball diamond bases

Figure 4: Soil Sample Locations for values greater than 500 ppm Pb

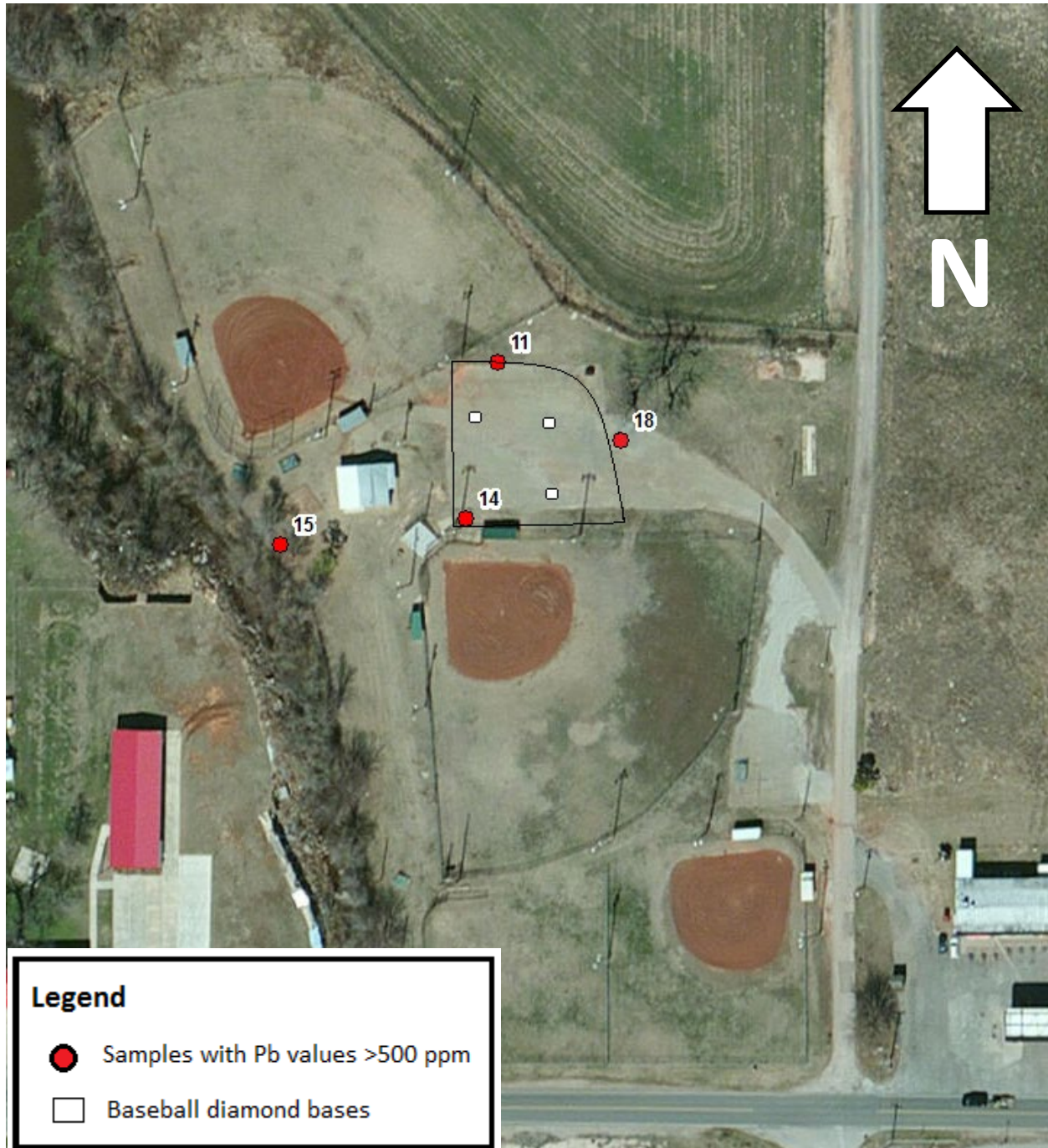


Table 1: Soil Sample Results

Sample ID	Location	Collection Method	Lead Value (ppm)
1	T-Ball Pitcher's Mound	Composite	<10
2	T-Ball Left Field	Composite	55.3
3	T-Ball Center Field	Composite	31.0
4	T-Ball Center Field	Duplicate of 3	43.8
5	T-Ball Right Field	Composite	62.3
6	T-Ball Fence Post	Grab	308
7	T-Ball Fence Post	Duplicate of 6	377
8	Near T-Ball Fence	Grab	237
9	Near T-Ball Fence	Grab	81.5
10	Near T-Ball Fence	Grab	106
11	T-Ball Fence Post	Grab	826
12	T-Ball Fence Post	Grab	34.1
13	T-Ball Dugout – West	Grab	78.2
14	T-Ball Catcher's Box	Grab	2270
15	Under Tree – West	Grab	803
16	Light Post	Grab	25.9
17	South Ball Field	Grab	322
18	Future Playground Site	Grab	597